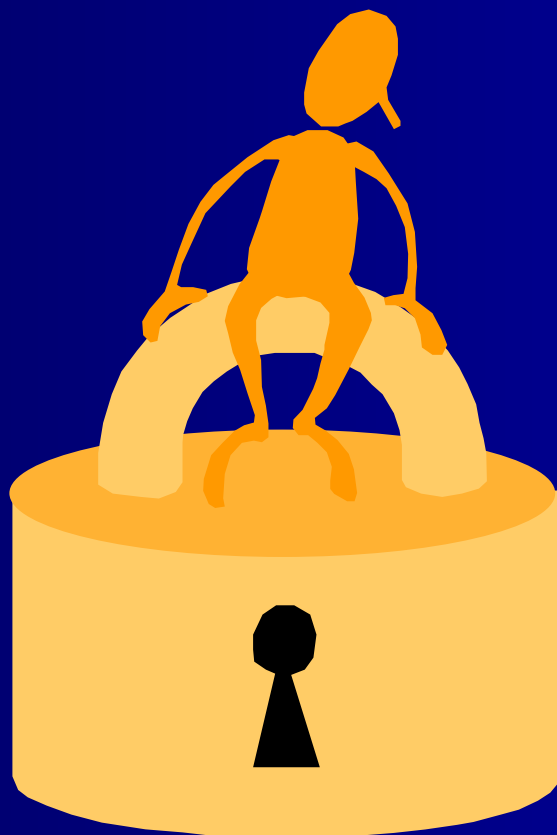
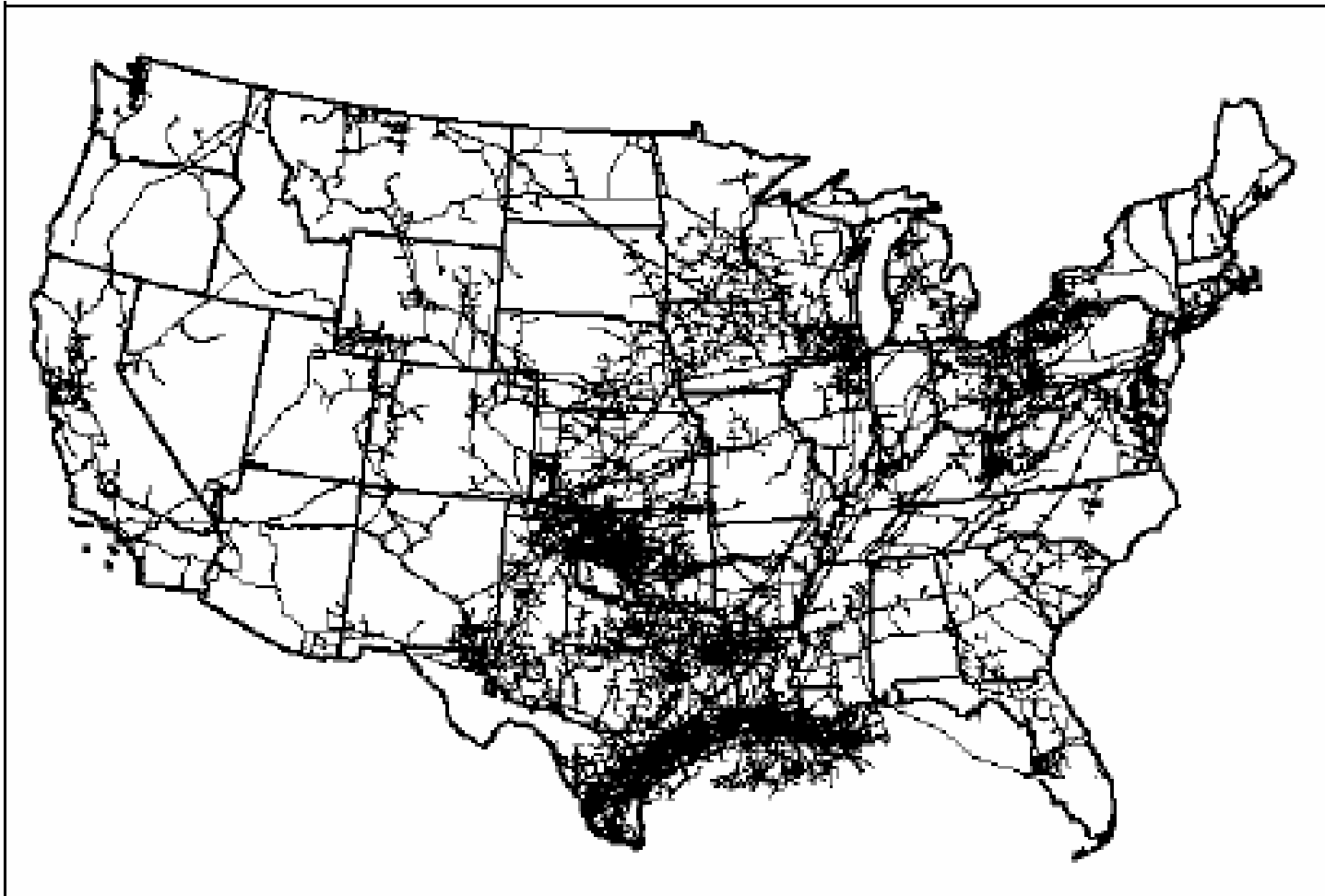


PIPELINE SECURITY



Overview

Figure 1: Major Pipelines in the Continental United States



Source: Energy Information Administration

Pipeline Security Risks

- Vulnerable to vandalism and terrorist attacks
- Facilities can be damaged by
 - Explosives or
 - Other mechanical means
- Attacks on regional electricity grids

Pipeline Security Risks

- Attacks outside the United States
 - Colombia - Occidental Petroleum
 - London
 - Nigeria, Pakistan, Sudan, Myanmar, Iraq and Saudi Arabia

Response by

■ OPS

- Communication check
- Removed web site maps
- Vulnerability assessments
- Criticality
- Provided formal guidance

■ TSA

- Pipeline Branch
- Regulations forthcoming
- Identify most critical assets
- Transportation Risk Assessment and Vulnerability Evaluation (TRAVEL)

